contrary to the generally accepted belief that the heat value of the metabolism is proportional to the body-surface area. Premature infants apparently produce only so much heat as is necessary for their well-being in the most advantageous surroundings. It is a well-known fact that the deprivation of external warmth from premature infants results in a subnormal temperature. They think that this is an evidence that the active heat-forming protoplasmic tissues are unable to respond to the excessive heat loss from the body, and, as a result, there is a subnormal temperature, and that the amount of heat formed depends upon the amount and tone of the active protoplasmic tissues, and not, primarily, on the size of the surface of the body of these infants. Close observation of premature infants shows very little muscular activity, and they were unable to obtain any data which would lead them to suppose that the heat used up in exercise in premature infants during the day was more than 10 per cent over the basal metabolism. The loss of calories in the excreta of infants is usually less than 10 per cent of the food intake, unless there are four or five large curdy stools a day, in which case the loss may be as high as 20 per cent. There is left, therefore, a proportionately large number of calories for growth.

Influenzal Meningitis.—RIVERS (*Am. Jour. Dis. Child.*, 1922, **24**, 102) reviews the literature of this disease representing 197 reported cases. He also reports 23 new cases. He found that influenzal meningitis was a disease of infancy, 79 per cent of the cases occurring in patients under two years of age. The mortality in 220 cases was 92 per cent. Of the 17 cases that recovered, 12 were two years or older. There is no typical clinical picture of influenzal meningitis, and many cases are probably overlooked. There is usually a polymorphonuclear leukocytosis. From the case records it is possible to say that the meningitis might have been primary in the majority of instances. Influenzal meningitis is probably a carrier-borne disease. The seasonal and yearly incidence of influenzal meningitis and of epidemic influenza and pneumonia do not coincide. The meningitic strains of influenza bacilli are closely allied to each other and differ from the ordinary respiratory strains of Bacillus influenzæ, particularly in their serologic reactions and in their pathogenicity for rabbits.

OBSTETRICS

UNDER THE CHARGE OF

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The Importance of Amniotic Liquid in the Preservation of Fetal Life.—KRAHULA (*Monatschr., f., Geburtsh., u., Gynäk.*, 1921, **55**, 199) has studied the relation existing between an abnormal condition

in the amniotic liquid and the condition of the child. Where this is in excess, although children may be born living, they die soon after birth, but 3.78 per cent of them survive their birth for a time and but 1.03 per cent of these children are normal. There seems to be no difference, so far as the chances of the child are concerned, whether there is but one child or whether there are two in the uterus. Where twins are present, the children are more often normal than where but one child is born. While twins may be born apparently normal, their ultimate chance of life and their power of resistance is no better than those of the one child. Where the amniotic liquid increases very rapidly during pregnancy, one must not expect that the infant will survive its birth. In view of the unfavorable prognosis for children the treatment of this condition by puncturing the uterus through the abdominal wall should be abandoned. This procedure is useless and in many cases is not without considerable danger. The one method of treatment which promises good results is to puncture the membranes through the cervix.

The After-history of Children Born by Cesarean Section.—DENCKER (*Monatschr. f. Geburtsh. u. Gynäk.*, 1921, 55, 207) is not content to take the results as ordinarily reported of children born by Cesarean section. It seems to him important to ascertain whether the operation really improves the child's chance for life or whether it increases its mortality or morbidity. He finds that children born by Cesarean section, as they develop, are in no way placed at a disadvantage with those children born spontaneously. It is true that in Cesarean section a child frequently comes into the world apneic; it is also true that children are often born after various sorts of birth in asphyxia. If in both these conditions a child is brought to breath naturally, they develop quickly and well, and neither condition has a permanently bad result. The narcosis of the mother does not seem to injure the child. The death-rate of children in the first month of life born by Cesarean section is estimated at 4.6 per cent, while the mortality of children in the first month of life born in other ways is 6 per cent. One cannot trace any increase in the mortality of children born by Cesarean section to the operation itself. Of those children born living by Cesarean section 95.4 per cent left the hospital in good condition. The physiological loss of weight in children born by Cesarean section is less than that of other children. Cesarean children, however, take a longer time to regain their initial weight, this lasting from twenty-one to thirty days. The further mortality of Cesarean children is found by studying mortality rate during the first three years of life, when it is found that 81.5 per cent of Cesarean children live through the first year, contrasted with 73.5 per cent of children born of married parents by natural birth, and 51.5 per cent of children born of unmarried mothers but in normal labor. The death-rate of children born by Cesarean section to married mothers is less, because under these circumstances the child usually has better care. The Cesarean child develops well physically and mentally, only 7.3 per cent are not well developed. In all the cases studied there was delay in nervous development in but one, and this child could not be called an idiot. Paralysis, epilepsy, chorea, spasms and other forms of nervous diseases were not seen in these children. One child had convulsions, which resembled somewhat mild epilepsy.

The minor nervous affections of children such as enuresis, night terrors, tetany and headache were no more common in Cesarean than in any other children. If all of the factors be taken into consideration it will be found that children born by Cesarean section are in no way injured physically or mentally. On the contrary they are better developed, often larger and better nourished than other children. In deciding upon the operation the obstetrician may conclude that he is giving the child a better chance for life and health than if it were to be born in any other way.

The Influence of Pituitary Extracts in Exciting Labor Pains in Pregnancy. — HELLMUTH (*Zentralbl. f. Gynäk.*, Nr. 37, September, 1921) has used this substance during the first stage of labor in 10 cases, in 8 of which it seemed to produce a decided effect, but in 2 of which it failed. During the second stage of labor he employed it in 34 cases with a successful result, and in 1 case without result. In all it was given 45 times, in 30 followed by an immediate effect. Among the 30 cases where prompt result followed were 8 in whom the so-called analgesia or twilight sleep had been employed. The drugs given to annul pain seemed to prevent the efficient uterine contraction and to make necessary the use of this remedy. It was used in 8 patients to check postpartum bleeding with success. The writer describes the case of a multipara whose labor was delayed by weak uterine contractions, for which this substance was administered. The child was 52 cm. long, weighing 3100 grams. The child was born in normal position and presentation, asphyxiated, with strong but greatly retarded heart beat; there was no effort at respiration. The heart continued to beat for thirty minutes, after which the child died. Efforts at resuscitation were fruitless. At autopsy, atelectasis of the lungs was found, with fatty degeneration of the heart muscle. There was no injury to the brain and no evidence that the membranes or bloodvessels had been injured. Some who have reported similar cases would say that an overdose had been given, and that the remedy had passed through the placenta into the body of the child, while others might think that some essential lesion in the heart was the cause of the death. In order to test the remedy further, it was tried in 4 other cases, but it was given in vain in 3; the uterus reacted very rapidly even during the time of the injection. The writer has also tried this remedy in 5 cases of abortion, where it seemed to control hemorrhage and promote involution in the puerperal periods. During the puerperal period the lochia was normal and no distinct effect of this substance could be detected. The writer has also used it to relieve the retention of urine in puerperal cases and in paralysis of the bowel after surgical operations.

Pregnancy After Nephrectomy.—In the *Journal of the American Medical Association*, November 19, 1921, MATTHEWS publishes an interesting paper upon this subject. His personal experience numbers four cases of women who had had nephrectomy and who subsequently gave birth to children. The first of his cases had the kidney removed for tuberculosis and made a good recovery after the operation. Pulmonary tuberculosis did not develop and the patient had a successful pregnancy and labor. The second case was also one of tuberculosis

in which a kidney had been removed. She subsequently developed albuminuria and the remaining kidney evidently became badly damaged. His third patient had the right kidney removed for suppurative nephritis. She subsequently had pyelitis in the remaining kidney during pregnancy, and had a premature labor, from which mother and child recovered. The fourth case had tuberculosis of the left kidney and ureter, upon which the operation was performed. She recovered from the operation, and subsequently had a spontaneous labor with breech presentation, mother and child making a good recovery. In all, the writer has quoted the histories of 265 labors, occurring in 241 women in whom a kidney had been removed. Of these labors 250 were normal and 15 complicated, with two deaths. The writer believes that after nephrectomy, pregnancy follows its normal course. It is but little more dangerous for mother and child than pregnancy under normal conditions, provided the remaining kidney is performing its functions properly. A slight albuminuria of moderate degree occurs in a certain proportion of the cases of pregnancy after nephrectomy, during the last four or six weeks, which under appropriate treatment usually clears up. In the thirty-seven collected and four personal cases herewith reported, 60 per cent showed albuminuria during the latter weeks of pregnancy. When nephrectomy has been performed for unilateral renal tuberculosis, it is imperative that the patient be free from symptoms of tuberculosis in the bladder, ureter, remaining kidney and lungs or elsewhere for three years or more before pregnancy is allowed to supervene. Pregnancy after nephrectomy for malignant tumors of the kidney should not be allowed under any circumstances. Pregnancy after nephrectomy should be terminated immediately on the advent of frank renal insufficiency, as shown by the relation of the nitrogenous products in the blood and urine. The likelihood of a severe "pregnancy pyelitis" or pyelonephrosis in the remaining ureter or kidney must be kept in mind, particularly if the remaining kidney be the right, and on the appearance of either condition immediate termination of the pregnancy is demanded. Labor in pregnancy after nephrectomy takes place without complications referable to the remaining kidney. The reviewer has had occasion to observe a patient whose kidney had been removed for tuberculosis and subsequently became pregnant. During the latter weeks of pregnancy, the urine showed evidence of kidney insufficiency; but very simple treatment in hospital was sufficient to carry the patient safely through her pregnancy and labor. After the birth of the child the urine became normal. Lactation is not interfered with and therefore, except for special reasons, nursing should be carried on in the usual manner. Marriage is permissible in nephrectomized women, provided the remaining kidney has functioned in a normal manner for one year or more. If the nephrectomy was for unilateral renal tuberculosis and a complete cure has been accomplished, as shown by the absence of symptoms in the remaining kidney or elsewhere for three years or more, marriage is still permissible. Finally, there is urgent need for more scientific and systematic study of the nephrectomized woman, both in the nonpregnant as well as in the pregnant state. A well "worked-up" report, including all laboratory methods for the determination of kidney function and urinary excretion, should be published of every case of pregnancy after nephrectomy.